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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
10593798	9/20/06	NIELSEN ET AL.	10576.204-US

NOVOZYMES NORTH AMERICA, INC.
500 FIFTH AVENUE
SUITE 1600
NEW YORK, NY 10110

EXAMINER

KAGNEW H. GEBREYESUS

ART UNIT	PAPER
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1656

20110308

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

This supplemental notice of allowance reflects correction including all currently allowed claims in addition to amendment to the dependency of claim 80.

/Manjunath N. Rao /
Supervisory Patent Examiner, Art Unit 1656

/KAGNEW H GEBREYESUS/
Examiner, Art Unit 1656

DETAILED ACTION

The following Office Action is a supplemental notice of allowance action to amend the dependency of claim 80.

EXAMINER'S AMENDMENT

Authorization for this examiner's amendment was given in a telephone interview with attorney Michael Krenicky on March, 8, 2011.

80. (Currently amended) The cell of claim **78**, in which the gene comprises at least one frame shift or non-sense mutation.

Claims 58, 61, 63-65, 67-68, 71, 73-75, 77-87 are allowed.

REASON FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: The closest prior art is the disclosure by Cao et al. (20030233675 A1) or (US7314974). Cao et al teach over-expressing a large number of sequences from *B. subtilis* to be expressed in plants for production of plants with improved properties. SEQ ID NO: 23287 in Cao et al shows 100% identity to the polypeptide SEQ ID NO: 2 in the instant invention. However Cao does not teach a microorganism wherein the reduced expression of the polypeptide of SEQ ID NO: 2 in a native microorganism in view of increasing/enhancing expression of heterologous proteins.

The claims in this application are drawn to mutated bacillus cells (a genus) where these cells have a reduced expression of a polypeptide of SEQ ID NO: 2 or SEQ ID NO: 4 (which are sequences that are from *B. subtilis* and *B. licheniformis* respectively) or

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sequences that are at least 95% identical to these sequences wherein said cells secrete higher amounts of at least one heterologous polypeptide of interest when compared to otherwise non-mutated cells. While the polypeptide of SEQ ID NO: 2 or 4 are postulated to be metal ion regulated their function is not clearly known. However since Applicants show that cells with reduced expression of SEQ ID NO: 2 or SEQ ID NO: 4 secrete a higher level of a recombinant heterologous proteins, one of skill in the art would be able to screen for increased protein secretion in bacillus cells comprising proteins with at least 95% identity to SEQ ID NO: 2 or SEQ ID NO: 4. Therefore claims 58, 61-65, 67-75 and 77-87 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAGNEW H. GEBREYESUS whose telephone number is (571)272-2937. The examiner can normally be reached on 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MANJUNATH RAO can be reached on 571-272-0939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Kagnew H Gebreyesus/
Acting Examiner of Art Unit 1656
March 8, 2011.

/Manjunath N. Rao /
Supervisory Patent Examiner, Art Unit 1656